#### Concept for Widening SR 77 to 8-Lanes

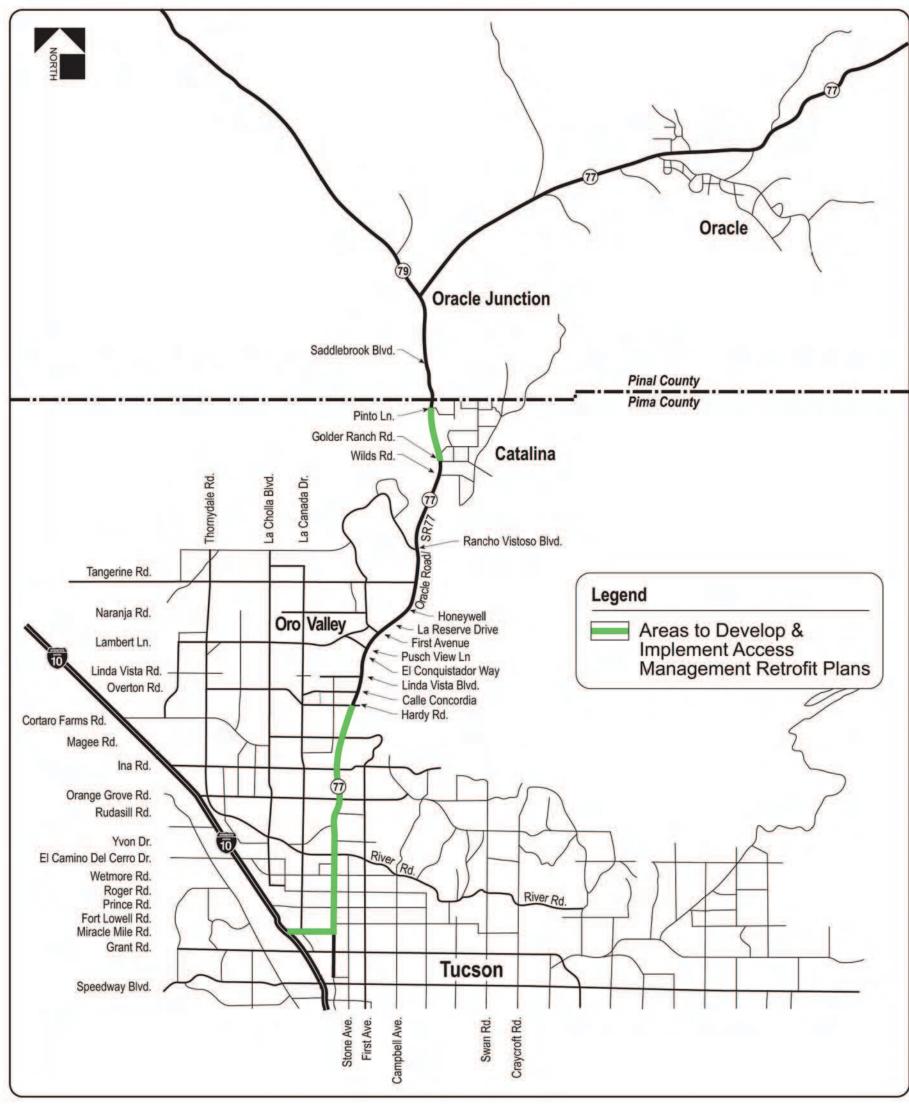
- From south of River Rd. to Ina Rd., SR 77 could be designed as an urban roadway, including:
  - 8 through traffic lanes
  - 8' areas behind the curb to include 5' sidewalks
  - 20' median (mid-block)
  - Dual left-turn lanes and full right-turn lanes at major intersections, with a 6' median.
  - 146' Right-of-Way required mid-block, and 162' at major intersections, 45 mph Speed Limit
- From Ina Rd. north to Golder Ranch Rd., SR 77 could be designed as a fringe urban roadway, including:
  - 8 through traffic lanes
  - 8' shoulders
  - 15' buffer area
  - 10' shared use paths for pedestrians and bicyclists
  - Dual left-turn lanes and full right-turn lanes at major intersections, with a 6' median.
  - 200' Right-of-Way required, with 50 mph Speed Limit







# Access Management Projects





#### Access Management

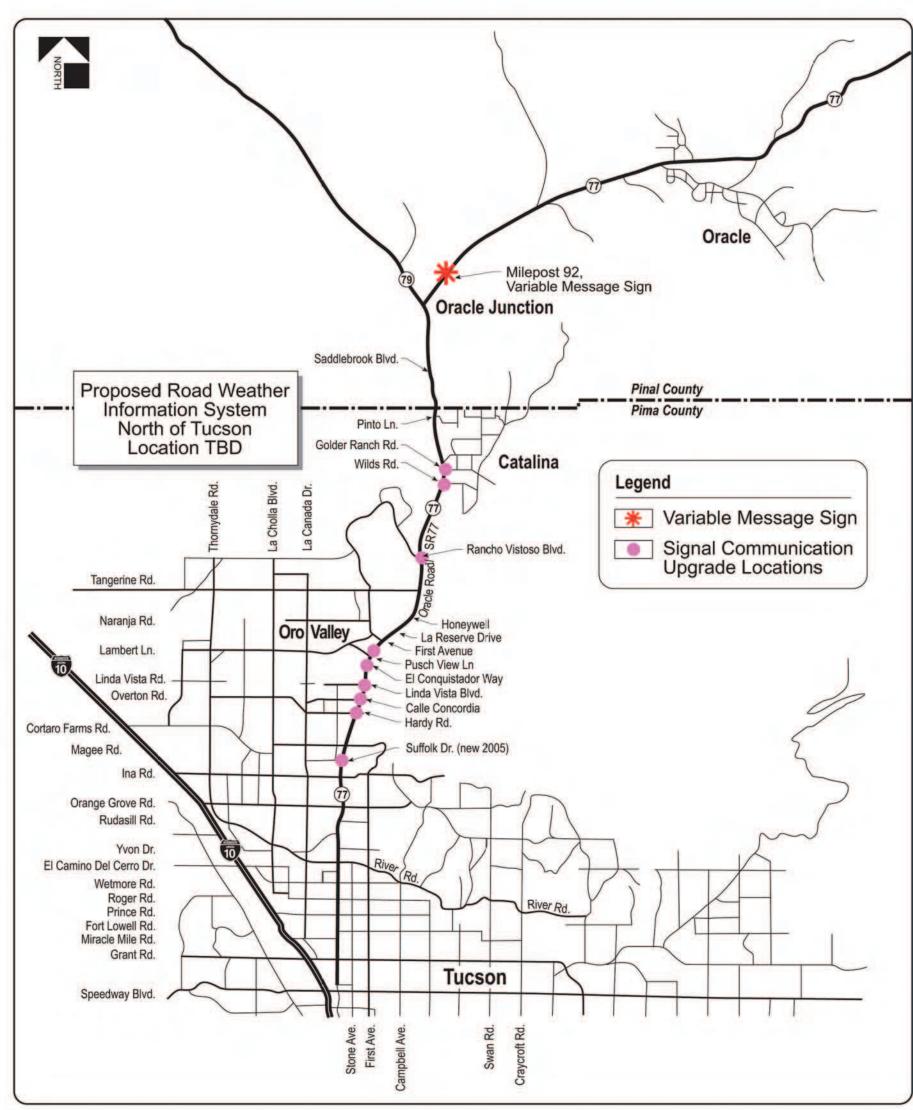
- This graphic illustrates the locations along SR 77 where Access Management could be used to improve safety and improve general traffic operations. The purpose and concepts of Access Management are explained in another exhibit board.
- It is recommended that the sections of SR 77 shown in this exhibit be studied in more detail to determine the best combinations of access management techniques (e.g., driveway consolidation, closing median openings, etc.) for individual locations along the roadway, and that the recommendations from these studies be implemented as soon as possible.







### **ITS Projects**





#### ITS Improvements

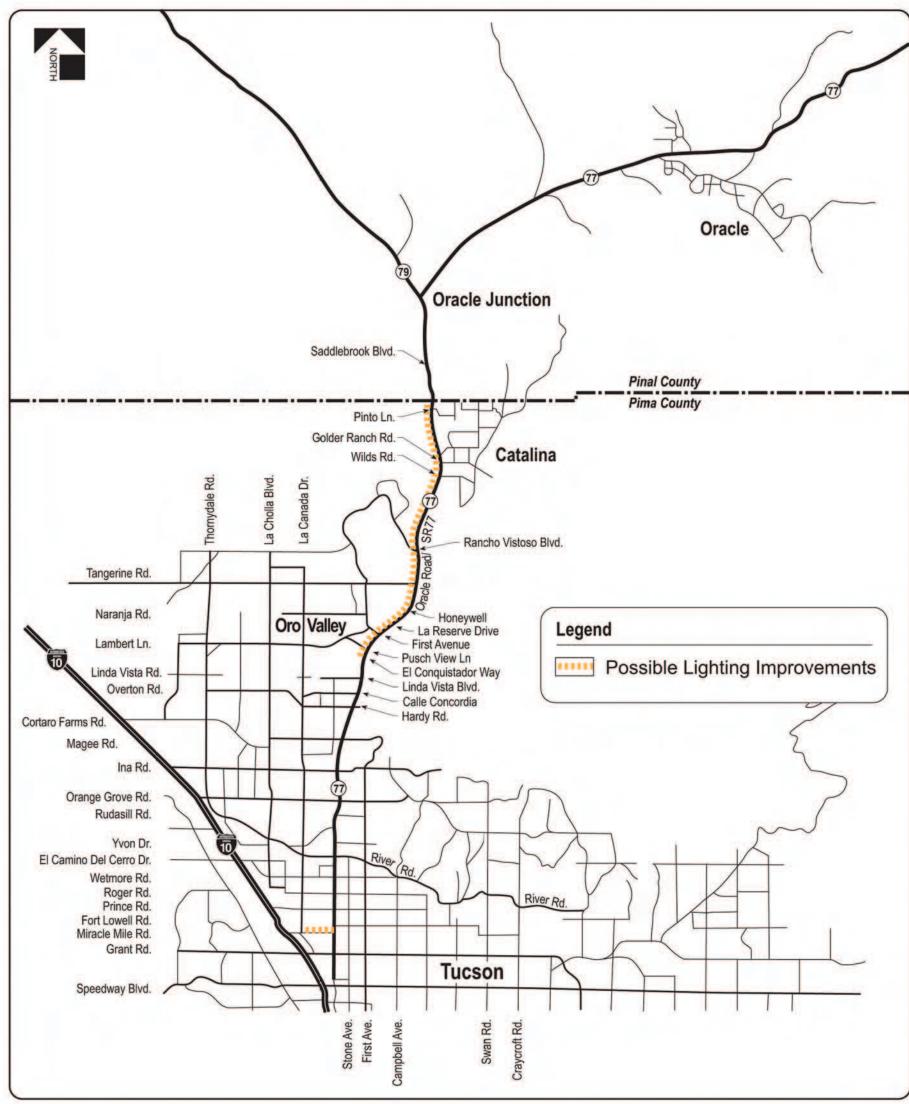
◆ ITS refers to Intelligent Transportation System improvements. ITS improvements include such things as roadside information systems, improved traffic signal control systems, and the use of electronic communications systems to improve traffic operations and safety. This exhibit indicates the ITS proposals for the SR 77 corridor. These proposals do not include the ITS elements that could be implemented to support transit system operations or provide transit user information.







### Possible Lighting Improvements





#### Possible Lighting Improvements

- This study indicates that there may be a need for street lighting improvements on some sections of SR 77, as illustrated in this exhibit.
- Street lighting may only be needed in the Oro Valley and Catalina areas of SR 77 if the programmed widening of the roadway to 6 lanes does not reduce the night/day ratio of crashes. Additional study is suggested after the widening is completed.
- Along Miracle Mile, it is recommended that the current lighting be upgraded.

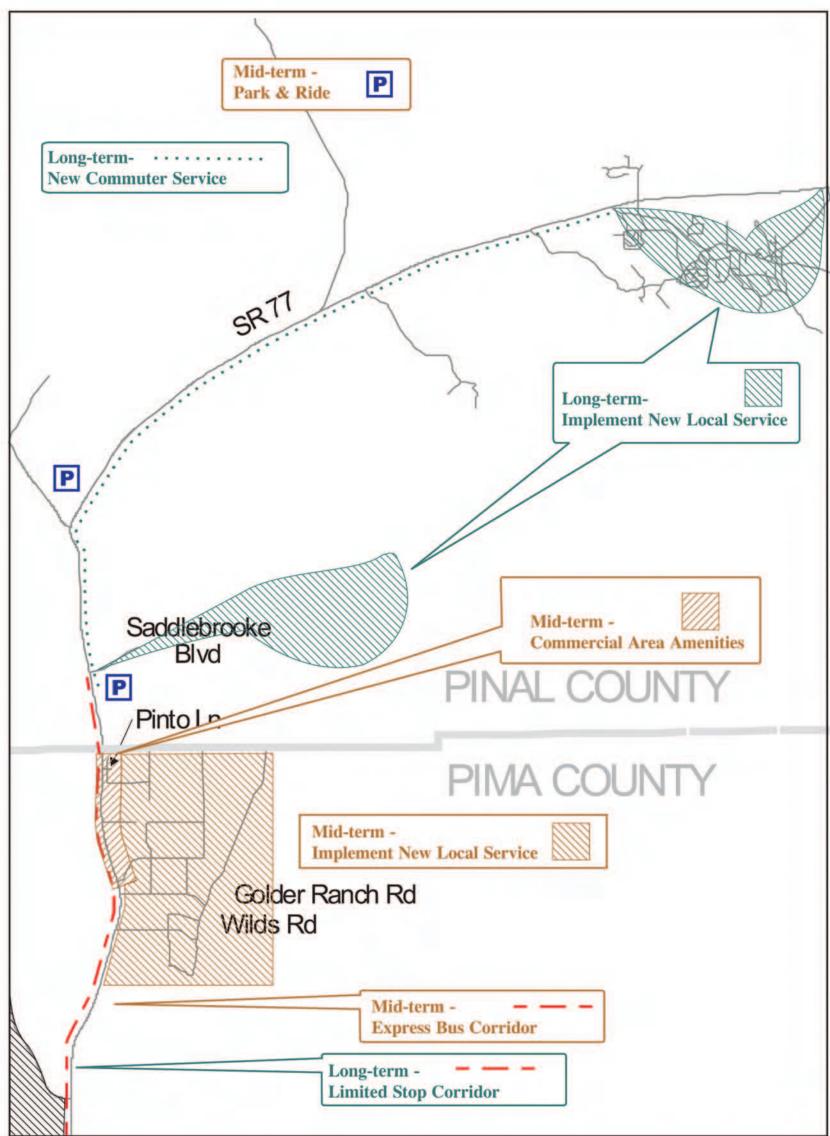






# Transit Recommendations

(North Half of Corridor)





### Mid-term Transit Improvements (North Half of Corridor)

#### Purpose:

 To improve mobility and options for transit-dependent persons and encourage more "choice" riders to use transit in corridor, thereby relieving congestion

#### Action:

- Implement express bus service along Oracle Road between the Saddlebrooke Park-and-Ride and the Tohono Tadai Transit Center
- Add new bus route along Orange Grove Road





# Long-term Transit Improvements (North Half of Corridor)

- Purpose: To enhance mobility and reduce traffic congestion caused by motorists making repeated short trips in local areas
- Action: Implement local area circulator services in the Town of Catalina and the Community of Saddlebrooke
- Purpose: To enhance long-term utility of transit by reducing travel times and increasing service
- Action:
  - Expand peak-hour express bus service into all-day limited stop service
  - Evaluate the use of diamond lanes for increased speed.
  - Study upgrade to Bus Rapid Transit





# Mid-term Transit Improvements (North Half of Corridor)

#### Purpose:

 To make commercial areas in the Town of Catalina safer and more convenient for transit users and pedestrians

#### Action:

- Construct commercial areas amenities for transit along Oracle Road in the Catalina area including bus stop benches and shelters
- Implement neighborhood circulator services in the Town of Oro Valley and the Town of Catalina to connect with Oracle Road services as area demographic thresholds are met



### Mid-term Transit Improvements (North Half of Corridor)

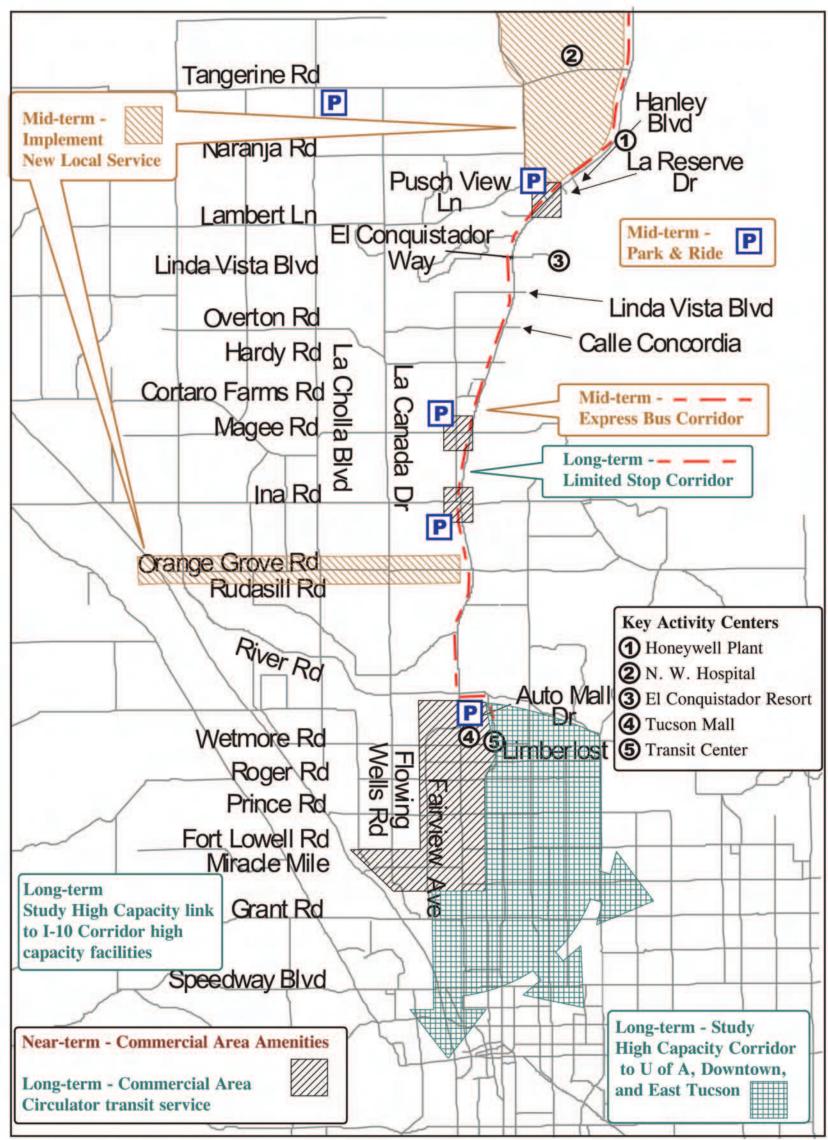
- Purpose: To encourage use of park-and-ride lots and transit by persons who would otherwise drive their entire commute
- Action: Add park-and-ride lots at or near following intersections:
  - Oracle/Saddlebrooke
  - SR 79/SR 77 junction
- Purpose: To improve mobility and options for transit-dependent persons and encourage more "choice" riders to use transit in corridor, thereby relieving congestion
- Action: Implement express bus service along Oracle Road between the
   Saddlebrooke Park-and-Ride and the Tohono Tadai Transit Center





### **Transit Recommendations**

(South Half of Corridor)





# Near-term Transit Improvements (South Half of Corridor)

- Purpose:
  - To make commercial areas of corridor safer and more convenient for transit users and pedestrians
  - To encourage increased use of transit
- Action: Construct sidewalks, crosswalks, and bus stop shelter and benches
  - Along corridor from I-10/Miracle Mile to Oracle/River
  - In vicinity of Oracle/Ina intersection
  - In vicinity of Oracle/Magee intersection





# Mid-term Transit Improvements (South Half of Corridor)

- Purpose: To encourage use of park-and-ride lots and transit by persons who would otherwise drive their entire commute
- Action: Add park-and-ride lots at or near following intersections:
  - Oracle/River
  - Oracle/Ina
  - Oracle/Magee

- Oracle/First
- La Cholla/Tangerine
- Oracle/Saddlebrooke
- SR 79/SR 77 junction
- Purpose: To enhance the convenience and utility of transit in the Town of Oro Valley
- Action: Implement neighborhood circulator services in the Town of Oro Valley to connect with Oracle Road services as area demographic thresholds are met



# Long-term Transit Improvements (South Half of Corridor)

- Purpose: To encourage commercial activity and reduce traffic congestion caused by motorists making repeated short trips in commercial areas
- Action: Implement commercial area circulator services in the area from I-10/ Miracle Mile to Oracle/River and in the vicinity of the Oracle/Ina and Oracle/Magee intersections
- Purpose: To enhance long-term utility of transit by reducing travel times and increasing service
- Action:
  - Expand peak-hour express bus service into all-day limited stop service
  - Evaluate the use of diamond lanes for increased speed.
  - Study upgrade to Bus Rapid Transit





### Long-term Transit Improvements (South Half of Corridor)

#### Purpose:

 To identify the appropriate future role of high-capacity transit in the corridor

#### Action:

- Study high-capacity corridor from the Tucson Mall area to the U of A, Downtown, and East Tucson
- Study high-capacity link from the Tucson Mall area to I-10 corridor high capacity facilities



